

INTERNATIONAL SEARCH REPORT

In ☐ National Application No

PCT/GB 03/04388

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/02 C07K14/47 C07K14/195

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, MEDLINE, WPI Data, PAJ, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>RAHMAN Q K ET AL: "Breaking the non-responsiveness of C57BL/6 mice to the malarial antigen EB200: The role of carrier and adjuvant molecules." SCANDINAVIAN JOURNAL OF IMMUNOLOGY, vol. 58, no. 4, October 2003 (2003-10), pages 395-403, XP002272656 ISSN: 0300-9475 (ISSN print) abstract page 396, column 1, paragraph 3 page 399, column 1, paragraph 1 -column 2, paragraph 1; table 2 page 401, column 1, paragraph 2 -page 402</p> <p style="text-align: center;">-/--</p>	<p>1,2, 8-12, 19-23, 34-43</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 March 2004

Date of mailing of the international search report

29/03/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; SHENGWU HUAXUE YU SHENGWU WULI XUEBAO, May 2001 (2001-05) LI MING_FENG ET AL: "A candidate oral vaccine to Helicobacter pylori: Fusion protein of HspA and CtxB" Database accession no. prev200100290633 XP002272812 abstract</p>	1-4,11, 12, 19-21, 34-43
-X-	<p>WO-96-05866-A (BLANKENSTEIN THOMAS ;MAX -- DELBRUECK CENTRUM (DE); CAYEUX PEZZUTTO S) 29 February 1996 (1996-02-29) abstract</p>	1-4,11, 12,34-43
Y	<p>page 3, paragraph 2 -page 5, paragraph 1</p>	5-7, 13-18, 24-26
X	<p>WO 01 64739 A (COBRA THERAPEUTICS LTD) 7 September 2001 (2001-09-07) abstract</p>	12-15,49
Y	<p>page 4, line 4 - line 32 page 11, line 20 -page 12, line 29; claims 1-3</p>	5-7, 13-18, 24-26
X	<p>WO 01 35810 A (DANA FARBER CANCER INST INC ;SHERR DAVID (US); UNIV BOSTON (US); M) 25 May 2001 (2001-05-25) abstract page 9, line 14 -page 10, line 29 page 17, line 11 - line 15</p>	12,14, 17,35-40
X	<p>US 5 830 464 A (SRIVASTAVA PRAMOD K) 3 November 1998 (1998-11-03) abstract</p>	48
Y		9,22
X	<p>DJEHA A H ET AL: "EXPRESSION OF ESCHERICHIA COLI B NITROREDUCTASE IN ESTABLISHED HUMAN TUMOR XENOGRAPTS IN MICE RESULTS IN POTENT ANTITUMORAL AND BYSTANDER EFFECTS UPON SYSTEMIC ADMINISTRATION OF THE PRODRUG CB1954" CANCER GENE THERAPY, NORWALK, CT, US, vol. 7, no. 5, May 2000 (2000-05), pages 721-731, XP001015218 ISSN: 0929-1903 cited in the application the whole document</p>	49
A		1-48
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	BLACHERE N E ET AL: "HEAT SHOCK PROTEIN VACCINES AGAINST CANCER" JOURNAL OF IMMUNOTHERAPY, RAVEN PRESS, NEW YORK, NY, US, vol. 14, no. 4, 1993, pages 352-356, XP000973693 ISSN: 1053-8550 abstract	9,22
A	WO 98 17799 A (WANG BIN ;UNIV PENNSYLVANIA (US); APOLLON INC (US); BOYER JEAN D () 30 April 1998 (1998-04-30) abstract page 14, line 1 -page 15, line 21 page 27, line 3 -page 28, line 21; claims 1,2,5-36	
A	US 5 182 109 A (AIZAWA CHIKARA ET AL) 26 January 1993 (1993-01-26)	
A	XU G ET AL: "Strategies for enzyme/prodrug cancer therapy." CLINICAL CANCER RESEARCH: AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH. UNITED STATES NOV 2001, vol. 7, no. 11, November 2001 (2001-11), pages 3314-3324, XP002272658 ISSN: 1078-0432	
A	GROVE J I ET AL: "VIRUS-DIRECTED ENZYME PRODRUG THERAPY USING CB1954" ANTI-CANCER DRUG DESIGN, BASINGSTOKE, GB, vol. 14, no. 6, December 1999 (1999-12), pages 461-472, XP009003925 ISSN: 0266-9536	
A	SRIVASTAVA P K ET AL: "HEAT SHOCK PROTEIN-PEPTIDE COMPLEXES IN CANCER IMMUNOTHERAPY" CURRENT OPINION IN IMMUNOLOGY, CURRENT BIOLOGY LTD. LONDON, GB, vol. 6, no. 5, 1994, pages 728-732, XP002037578 ISSN: 0952-7915	

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 41 - 49 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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